



PATENT
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Makoto Kikuchi et al. Art Unit:
Serial No.: 09/214,569 Examiner:
Filed : January 7, 1999
Title : NOVEL USE OF MK FAMILY AS HEMAPOIETIC FACTOR

Assistant Commissioner for Patents
Washington, DC 20231

BOX PCT

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO 1449, copies of which are enclosed.

The relevance of each non-English reference is explained below.

Reference AE discloses cytokines that regulate proliferation and each step of the differentiation of hematopoietic stem cells. The cytokines disclosed are EPO, G-CSF, TPO, GM-CSF, M-CSF, SCF, LIF, flt3 ligand, IL-1 α , IL-1 β , IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, TNF- α , TGF- β 1, MIP1 α , and IFN- γ . The reference also discloses characteristics and functions of these cytokines.

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Date of Deposit June 24, 1999

I hereby certify under 37 CFR 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office To Addressee" with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Francisco Robles

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This statement is being filed before the receipt of a first Office action on the merits. Please apply any charges or credits to Deposit Account 06-1050.

Respectfully submitted,

Date: 6/24/99

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SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 06501/026001		SERIAL NO. 09/214,569	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 CFR 1.98(b))				APPLICANT Makoto Kikuchi et al.			
				FILING DATE January 7, 1999		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION							
		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION YES NO
	AC						
	AD						
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)							
	AE	Bessho, Igaku no Ayumi (Progress in Medicine) 180(13):802-806, 1997. In Japanese with English explanation.					
	AF	Kadomatsu et al., "cDNA Cloning and Sequencing of a New Gene Intensely Expressed in Early Differentiation Stages . . . Embryogenesis," Biochem. Biophys. Res. Commun. 151(3):1312-1318, 1988.					
	AG	Kubo et al., "Different responses of human marrow and circulating erythroid progenitors to stem cell factor, interleukin-3 and granulocyte/macrophage colony-stimulating factor," Int. J. Hematol. 58:153-162, 1993.					
	AH	Lyman et al., "Cloning of the Human Homologue of the Murine flt3 Ligand: A Growth Factor for Early Hematopoietic Progenitor Cells," Blood 83(10):2795-2801, 1994.					
	AI	Rauvala, "An 18-kd heparin-binding protein of developing brain that is distinct from fibroblast growth factors," EMBO J. 8(10):2933-2941, 1989.					
	AJ	Shiohara et al., "Synergism of Interferon- γ and Stem Cell Factor on the Development of Murine Hematopoietic Progenitors in Serum-Free Culture," Blood 81(6):1435-1441, 1993.					
	AK	Tsuji et al., "Enhancement of Murine Blast Cell Colony Formation in Culture by Recombinant Rat Stem Cell Factor, Ligand for c-kit," Blood 78(5):1223-1229, 1991.					
EXAMINER				DATE CONSIDERED			
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							